Project Number:		
For U&CF	Use Only	



# **GRANT APPLICATION FORM**

# Arizona Community Challenge Grant Program

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Project Title: Ward 3 Urban Food Forest
Category: Category 1: Workshops, Cut 2 = Commonity fort monganit, Cut 3 = Tree In
Location (City): Tucson (Cat 6: 5 trategies to build forest resilie
Tree City USA (if applicable):
Name of Applicant: NEST, Inc
Address of Applicant: PO Box 41144
City Tucson State Az Zip 85717
Contact Person: Rob Cook Daytime Phone #: (520) 323-0242
E-Mail: Unispan ( Dekota com. not Organization's Federal ID# 86-0641419
Brief Project Description: (Please attach a separate, maximum 3-page narrative that clearly
states the project need, objectives, methods, and deliverables.)
Is this project currently funded?  Was this project previously funded?  Was this project previously funded?  Can this project occur without grant funding?  Yes  No  Was this project previously funded?  Yes  No  Can this project amount?  Yes  No
(a) UCF Funds Requested \$ 9,991 00
(b) Local \$ Match Provided \$
(c) Value of In-Kind Match \$ \$ \$ 9,068 °°
Total Project Amount (a+b+c) \$ 29, 059
Timetable: (Starting Date) <u>Journ</u> 2015 (Ending Date) <u>Dec</u> 2015  Volunteer Involvement [Name of Group(s)]: <u>See Program narralive</u>
Name of Representative  NEST Boord / Project Manager  Title of Representative  10/23/4
Signature of Authorized Representative Date

Upon authorization of approval for financial assistance, grantees will be assigned a grant number and a maximum dollar amount to expend. Prior to expending funds, applicants must submit an updated project workplan.

# **BUDGET PROPOSAL FORM**

For U&CF Use Only

# **Arizona Community Challenge Grant Program**

**Applicant Name:** 

NEST, Inc Ward 3 Urban Food Forest **Project Title:** 

BEST 15 (B. C					
Item	Grant Share Direct Expenses or Cash Purchases	Applicant Direct Expenses or Cash Purchases	Applicant In-kind Personnel Services: Volunteer and Staff Hours	Applicant In-kind Donated: Services, Supplies, or Equipment use	Total
Administration (Project-related Labor, both staff time and volunteer and Fringe Benefits)	4675	200	17,833	675	43,383
Contractual Services (consultants, landscape architects, arborists, engineers, etc.)	2166	φ	Ø	ø	2166
Supplies (itemize as necessary – plant materials, printing costs, educational materials, postage, etc.)	100	340	φ	\$	460
Other (anything that doesn't fit into one of the categories above)	3050	φ	φ	ø	3050
Other		William Control			
TOTAL:	9,991	500	17,833	G 75	29,059

This form is for the summary of your budget information. A detailed list of expenditures and a budget narrative should be provided if necessary (2-pages max).

### Ward 3 Urban Food Forest

# Applicant information

NEST is a 501(c)(3) corporation that was established in 1989 in order to be the fiduciary agent for local organizations that are not themselves non-profit corporations. NEST was the fiduciary agent for the LEAF project that was funded under this program.

# **Project Goals and Objectives**

The Ward 3 Urban Food Forest project is both

- a proof-of-concept demonstration that large amounts of food can be produced from existing trees in established Tucson neighborhoods, and
- a prototype of a tool that will care for and harvest existing urban food trees and can be expanded quickly to all of Tucson.

Our just-in-time food system keeps less than four days of food in Tucson. We produce only a few percent of our food in Arizona, and almost all the rest comes from over 1000 miles away. Tucson does not have a secure food supply.

Water is a key constraint on expanding our existing local food supply. While we receive roughly 80,000 gallons of local, renewable water in the form of rain and "net natural recharge", it will take decades to craft and implement a regional Resilient Food Security strategy. If this should be a concern, then time is not on our side.

The quickest way to jump start a community food security plan is to harvest what we already have and currently waste - the bounty from 100s of thousands of food producing trees that are not currently harvested. The largest number of these trees aren't even recognized as food producing, particularly mesquite, cholla, and prickly pear, which are widely used as landscaping plants in Tucson.

### **Anticipated Project Benefits**

The goal of the Ward 3 Food Forest project is to develop a proof-of-concept approach to a joint community and commercial food production system that uses and expands existing food tree resources.

The Ward 3 Urban Food Forest project will:

- Develop replicable techniques to identify, assess, and quantify the under-utilized food tree resources in selected parts of Ward 3.
- Develop ongoing capacities involving both volunteers and professionals to care for neighborhood food trees and arrange for their harvest.

### **Project Methodology**

One of the key outcomes of this project is the creation of a Food Forest Stewards Corps. The vision behind this Corps is:

Existing and future neighborhood trees are well and effectively cared for in order to produce maximum community benefits thru regular harvesting of food trees for the benefits of neighbors and low-income families throughout Tucson, and thru the promotion of shaded streets and community gathering spaces.

### Mission of Food Forest Stewards Corps

- Train and coordinate a neighborhood volunteer corps what will work together
  to insure that neighborhood food trees are properly cared for and regularly
  harvested for the benefit of the neighbors and low-income families throughout
  Tucson.
- Promote the continued development of a neighborhood food forest that provides both food and the establishment of shaded streets and neighborhood gathering spots that emphasize both community cohesion and food production.

#### Phase I

Assess the food potential of the existing Food Forest in parts of City of Tucson Ward 3 and begin recruiting volunteers to inventory and assess existing food trees:

- Recruit and train volunteers to survey neighborhood trees.
- Develop computer-based tools to record data.
- Develop a low-cost procedure for surveying food tree resources that can be replicated in other neighborhoods.
- Develop initial list of contributing food trees.

#### Phase II

Form, train, and support a neighborhood Food Forest Stewards Corps to care for and harvest neighborhood food trees. Goals are to:

- Create the Food Forest Stewards Corps and train volunteers to care for and harvest food trees in the participating neighborhood areas.
- Organize social networking events based on food harvested from participating neighborhoods to build cohesive social support for Food Forest Stewards and maintain a high level of community involvement.
- Develop organizational support for Food Forest Stewards in the form of web presence, online harvest scheduling and a database of contributing food trees.
- Develop training videos and other materials based on training workshops, tours, and presentations.
- Develop a list of trained arborists who can provide more intensive care, as needed.

The project manager for the W3 Urban Food Forest is Tres English. He is a property manager and licensed remodeling contractor. Mr. English ran the Teaching & Helping program for 7 years. It taught students and volunteers to repair existing homes using a "service-learning" model which relied on experienced mentors to teach skills to inexperienced volunteers using hands-on projects. This approach will be used frequently in the training for tree care and harvesting used in this project.

Facilities and equipment, such as licensed kitchens and harvesting tools, will be provided by program partners.

The project will start as soon as the grant is approved. Phase 1 will take approximately 2-3 months, and Phase 2 will continue thru the end of the year.

The output of this project will be:

- Establish Food Forest Stewards Corps ongoing volunteer group that will work with neighbors in self-selected areas of Ward 3 to care for and harvest existing food trees.
- Assessment of the condition and potential productivity of existing food trees, and the development of procedures to interpret publicly available tree canopy for food and shade potential
- Smart-phone apps to allow for the easy recording of tree survey data.
- Online database for recording "contributing" food trees that participate in harvesting program.
- Training videos of tree care and harvesting techniques prepared by UA Extension Service and Partner organizations and other local experts.

## **Partner organizations**

The following organizations have committed to provide a variety of services.

- Ward 3 Neighbors Alliance, John Kovacik <jkovacik@cox.net>
  - Organizing assistance to recruit volunteers from throughout the City of Tucson Ward 3, neighborhoods, businesses, and civic groups.
- - Providing training programs for neighborhood volunteers on the care of urban food trees
- Sustainable Tucson/Feeding Tucson, Ron Proctor <rongoproctor@gmail.com>
  - o Website hosting and public forum on results of W3UFF project
- Iskashitaa Refugee Network, Barbara Eiswerth,
  - <Eiswerth@iskashitaa.org>
    - Training in harvesting urban food trees, educational materials on urban food trees, database management for contributing food trees.
- - Use of church's licensed kitchen facilities for food demonstration programs, meeting rooms and insurance coverage for Food forest Steward volunteers while using church facilities
- Watershed Management Group, Catlow Shipek <catlow@watershedmg.org>
  - o Training workshop for water harvesting and/or graywater systems and insurance for Food forest Steward volunteers while on project.

# **Budget Narrative**

The Ward 3 Urban Food Forest project has two main functional areas:

- Assessment of the state and food potential of the existing food forest and development of a methodology that can be easily replicated in other areas.
- Training of volunteers for basic food forest maintenance and harvesting and the development of related videos and other educational materials.

#### **Assessment of the Urban Food Forest**

The food forest assessment will be conducted by volunteers who are trained to recognize the roughly 35 food tree species that are common in Tucson, as well as to assess the general condition of all trees and their relevance for providing shade.

A dozen or more volunteers will leaflet approximately 1500 households in roughly a dozen areas around the City of Tucson Ward 3. Leaflets will explain the W3 Food Forest project and invite people to a public meeting on the subject. Volunteers will then take a sample of approximately 8% of all properties and assess the condition of the food trees on those properties. (Sample properties will generally consist of about 10-15 houses in the vicinity of the homes of each volunteer.)

Data on the trees from the sample homes will be recorded with a smart-phone app developed by the University of Arizona's GIS Technology Department students and recorded in an online database. This data will be compared to tree canopy data published by the Pima Association of Governments. The resulting analysis will be used to develop metrics that relate the tree canopy in the area with the number and size of various food trees.

Finally, these estimates will be compared with harvesting data collected by the Iskashitaa Harvesting Network to estimate the total food capacity of the current Urban Food Forest.

#### Volunteer recruitment

The key innovation of this proposal is the heavy emphasis on the use of social networking activities centered around food. The rational for this approach is that people who are engaged in shared work with each other will be more likely to follow thru on their commitments and be willing to continue them after the period of the grant.

As a result, a substantial amount of volunteer time is expended in social activities, such as potlucks and cooking lessons for food that is harvested from neighborhood trees. A series of potlucks that feature local and neighborhood foods will be scheduled throughout the program.

### **Training Volunteers to maintain existing food trees**

The UA Agricultural Extension Service will provide a series of lectures and workshops on how to maintain the health of urban food trees. These lectures and neighborhood tours will be supplemented by several other organizations to expand the coverage of the training. Additional activities will include an Eat Your Neighborhood tour, Permaculture Guilds, and shade for sun control.

In-kind contributions include training from the Extension Service and an extensive database of characteristics, care, and harvesting of edible trees from Iskashitaa.

In addition, the W3UFF project and Iskashitaa will compile a list of arborists and nurseries that are experienced with care for urban food trees, and will make that list available to the Food Forest Stewards Corps as back up for ongoing tree care.

### **Establishment of Food Forest Stewards Corps**

One of the outputs of this project is to create an online scheduling system so that neighbors who have problems with their food trees can get help. Members of the Food Forest Stewards Corps will provide preliminary assessment and minor assistance to participating neighbors who contribute some of their food to Iskashitaa and the Community Food Bank. The list of certified arborist with experience with urban food trees will be a resource that neighbors can use for more complex problems.

#### Training videos and materials

All training programs will be recorded and turned into training videos that will be available on YouTube. In addition, written materials will be compiled and made available, along with the videos, on the Feeding Tucson website. (Feeding Tucson is a project of Sustainable Tucson.)

A camera and digital audio equipment will be purchased for this purpose.



**EMERGENCY MANAGEMENT** 

3434 E. 22<sup>nd</sup> Street, Ste. A, Tucson AZ 85713 (520) 724-9300 Office (520) 724-9310 Fax

October 13, 2014

To Whom It May Concern,

Pima County's Office of Emergency Management and Homeland Security is supportive of the efforts to build awareness to the issue of food security and develop systems to maximize the utilization of local supply.

As FEMA continues to stress resiliency as a model for communities to be prepared in the event of a sustained catastrophe, it is essential that we examine local capacities. The potential threat to disrupt our food supply is great and our community is vulnerable in that it relies almost exclusively on outside sources to supply the majority of consumable food. Identifying alternatives is essential. As a community we can ill afford to ignore the effects of climate change. Nor can we discount the fragility of our food supply given the potential of long term disruptions. to the power supply.

Pima County embraces the whole community approach to preparedness and believes the Ward 3 Urban Food Forest Project fits nicely into that paradigm. We commend Sustainable Tucson and the Ward 3 Neighbors Alliance for examining the potential of harvesting urban tree food to supplement existing resources while building networks of groups to maximize the available asset. We look forward to working with them to bolster our ability to respond to events and examine ways to improve Tucson's resilience.

Sincerely,

Mike Hein, Director

Office of Emergency Management

3434 E. 22nd Street, Ste. A

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